

PROPOSED AMENDMENTS TO THE CLAIMS

1. A computer comprising a processor in communication with a memory; said memory having stored therein

(i) structural coordinates sufficient for generating a three-dimensional model of a Polo-box domain of a Plk-1 Polo-like kinase comprising at least one set of x, y, and z atomic coordinates from Table 5, or a mathematical modification of Table 5 that preserves the relative three-dimensional relationships among the coordinates of Table 5, from a given atom of each of residues His-538, Tyr-540, Trp-414, and Leu-491 of a said Polo-box domain of a said Plk-1 Polo-like kinase, or a set of x, y, and z atomic coordinates that have a root mean square deviation of said set of x, y, and z atomic coordinates of said Polo-box domain of less than 3 Å; and

(ii) a program for generating a three-dimensional model of said Polo-box domain of said Plk-1 Polo-like kinase utilizing said coordinates of (i), above.

wherein said computer is capable of outputting a representation of said three-dimensional model of said Polo-box domain of said Plk-1 Polo-like kinase to a display or memory.